

FORM I	PTO - 1	1449			ATTY DOCKET NO.: ASC-023DVC2					
SUPPLE	EMENT	TAL INFORMA	ATION		APPLICA	NT:	' Fit	zgerald		
DISCLO	SURE	STATEMENT			SERIAL NO.: 10/022,689					
					FILING DATE: December 17, 2001					
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			TIC	DATENIT	GROUP: 2813 IT DOCUMENTS					
EXAM.		DOCUMENT	DATE U.S.	NAME	DOCUM	ENIS	CLASS	CUD	T	
INIT.		NUMBER	DATE	NAME			CLASS	SUB CLASS		NG DATE IF ROPRIATE
101	A117	5,424,243	06/13/1995	Takasaki						
121	A118	2002/0052084	05/02/2002	Fitzgerald					05/1	6/2001
M	A119	2003/0077867	04/24/2003	Fitzgerald	Fitzgerald				07/1	6/2001
TOY	A120	6,602,613	08/05/2003	Fitzgerald					01/1	7/2001
			FOREI	GN PATE	NT DOCL	MENTS				
EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	FILING DATE	ABSTR/ ONLY	ABSTRACT ENGLISI ONLY LANG (Y/N)	
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			OTHER AR	T, JOURI	NAL ART	ICLES, E	TC.			
EXAM. INIT.	ОТН	ER DOCUMENT	S: (Including	Author, Ti	tle, Date, Re	levant Pag	es, Place o	f Publicati	on)	
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VER 9/00 2672598-1 (Rev. 5/92)

FORM PTO-1449 SAMUELS, GAUTHIER & STEVENS LLP 225 Franklin Street, Boston, MA 02110

Telephone: (617) 426-9180

INFORMATION DISCLOSURE

STATEMENT BY APPLICANT

## Eugene A. Fitzgerald APPLICANT

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<u>Unknown</u> SERIAL NO.

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## U.S. PATENT DOCUMENTS

		1					1
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
COY	AA	5,177,583	January 5, 1993	Endo et al.	257	190	January 10, 1991
	AB	5,298,452	March 29, 1994	Meyerson	437	81	February 21, 1992
	AC	5,630,905	May 20, 1997	Lynch et al.	438	507	June 5, 1995
	· AD	5,906,951	May 25, 1999	Chu et al.	438	751	April 30, 1997
	AE	5,659,187	August 19, 1997	Legoues et al.	257	190	June 7, 1995
	AF	5,891,769	April 6, 1999	Liaw et al.	438	167	February 27, 1998
	AG	5,714,777	February 3, 1998	Ismail et al.	257	263	February 19, 1997
	AH	5,534,713	July 9, 1996	Ismail et al.	257	24	May 20, 1994
	AI	5,250,445	October 5, 1993	Bean et al.	437	11	January 17, 1992
	ĄJ	4,997,776	March 5, 1991	Harame et al.	437	31	June 20, 1990
	AK	5,442,205	August 15, 1995	Brasen et al.			August 9, 1993
	AL	5,399,522	March 21, 1995	Ohori	,	, i	September 8, 1993
101	AM	5,250,445	October 1993	Bean et al.	438	474	
			FOREIGN	PATENT DOCUME	ENTS		
EXAMINER INITIAL		DOCUMENT NUMBER	DATE '	COUNTRY .	CLASS	SUBCLASS	TRANSLATION YES NO
COL	AN	0 514 018 A2	16.04.92	ЕРО			
101	AO	2 701 599	14.09.93	France			

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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INITIAL	
0.4	10

Currie et al., "Controlling Threading Dislocation in Ge on Si Using Graded SiGe Layers and Chemical-Mechanical Polishing,: Vol. 72, No. 14, p. 1718-1720. February 1998.

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Initial if citati n considered, wh ther or not citation is in conformance with MPEP 609; draw lin through citation if n t in conformanc and not consid red. Include c py f this form with n xt communicati n t applicant.

SUPPLEMENTAL INFORMATION

**BUSCLOSURE STATEMENT** 

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	EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	XIII	Al	4,010,045	03/01/1977	Ruehrwein			
	1	A2	4,710,788	12/01/1987	Dambkes et al.			
		A3	4,987,462	01/22/1991	Kim et al.			
Γ		A4	4,990,979	02/05/1991	Otto		ļ	
		A5	5,013,681	05/07/1991	Godbey et al.			
Γ		A6	5,155,571	10/13/1992	Wang et al.			
		A7	5,166,084	11/24/1992	Pfiester			
Γ		A8	5,202,284	04/01/1993	Kamins et al.	1		
		A9	5,207,864	05/04/1993	Bhat et al.			
Γ		A10	5,208,182	05/04/1993	Narayan et al.	<u> </u>		
		All	5,212,110	05/18/1993	Pfiester et al.			
		A12	5,221,413	06/22/1993	Brasen et al.			
		A13	5,241,197	08/31/1993	Murakami et al.			
Γ		A14 .	5,285,086	02/08/1994	Fitzgerald, Jr.	<u> </u>		
Γ		A15	5,291,439	03/01/1994	Kauffmann, et al.	ļ		
Γ		A16	5,310,451	05/10/1994	Tejwani et al.			
Γ		A17	5,316,958	05/31/1994	Meyerson			
Γ		A18	5,346,848	09/13/1994	Grupen-Shemansky et al.			<del></del>
Γ		A19	5,374,564	12/20/1994	Bruel	<del>                                     </del>		
Г		A20	5,413,679	05/09/1995	Godbey			
		A21	5,426,069	06/20/1995	Selvakumar et al.	1		
		A22	5,426,316	06/20/1995	Mohammad			
		A23	5,461,243	10/24/1995	Ek et al.			
		A24	5,461,250	10/24/1995	Burghartz et al.	1, .		<del></del>
Ĺ		A25	5,462,883	10/31/1995	Dennard et al.			
		A26	5,476,813	12/19/1995	Naruse	1		
		A27	5,479,033	12/26/1995	Baca et al.			<del></del>
L		A28	5,484,664	01/16/1996	Kitahara et al.			
	$\mathcal{L}$	A29	5,523,243	06/04/1996	Mohammad	,		
8	Du	A30	5,523,592	06/04/1996	Nakagawa et al.	T.		
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EXAM. INIT.	DOCUMENT NUMBER		DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
Men	A31	5,536,361	07/16/1996	Kondo et al.			
<del></del>	A32	5,540,785	07/30/1996	Dennard et al.			
	A33	5,596,527	01/12/1997	Tomioka, et al.			
	A34	5,617,351	04/01/1997	Bertin, et al.			
	A35	5,683,934	11/04/1997	Candelaria			
	A36	5,698,869	12/16/1997	Yoshimi et al.			
	A37	5,728,623	03/17/1998	Mori			
	A38	5,739,567	04/14/1998	Wong	1,1,1		
<del> </del>	A39	5,759,898	06/02/1998	Ek et al.	'		
1	A40	5,777,347	07/07/1998	Bartelink		1	
	A41	5,786,612	07/28/1998	Otani et al.		1	
	A42	5,786,614	07/28/1998	Chuang, et al.			
_	A43	. 5,792,679	08/11/1998	Nakato			
	A44	5,808,344	09/15/1998	Ismail et al.			
	A45	5,847,419	12/08/1998	imai et al.			
	A46	5,877,070	03/02/1999	Goesele et al.			
	A47	5,906,708	05/25/1999	Robinson et al.			
	A48	5,912,479	06/15/1999	Mori et al.			
	A49	5,943,560	08/24/1999	Chang et al.			
	A50	5,963,817	10/05/1999	Chu et al.			
	A51	5,966,622	10/12/1999	Levine et al.			
	A52	5,998,807	12/07/1999	Lustig et al.			
	A53	6,013,134	01/11/2000	Chu et al.			
	A54	6,033,974	03/07/2000	Henley et al.			
	A55	6,033,995	03/07/2000	Muller			
	A56	6,058,044	05/02/2000	Sugiura et al.			
	A57	6,074,919	06/13/2000	Gardner et al.	·		
	A58	6,096,590	08/01/2000	Chan et al.			
	A59	6,103,559	08/15/2000	Gardner et al.			
Wh	A60	6,111,267	08/29/2000	Fischer et al.			

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EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE		
RL	A61	6,117,750	09/12/2000	Bensahel et al.					
,	A62	6,130,453	10/10/2000	Mei, et al.					
	A63	6,133,799	10/17/2000	Favors, Jr., et al.			<del>                                     </del>		
	A64	6,140,687	10/31/2000	Shimomura et al.		<b></b>			
	A65	6,143,636	11/07/2000	Forbes, et al.					
	A66	6,153,495	11/28/2000	Kub et al.	,				
	A67	6,154,475	11/28/2000	Soref et al.	<del> </del>				
	A68	6,160,303	12/12/2000	Fattaruso	<del></del>		-		
	A69	6,162,688	12/19/2000	Gardner et al.	*				
	A70	6,184,111	02/06/2001	Henley et al.		· -			
	A71	6,191,007	02/20/2001	Matsui et al.					
	A72	6,191,432	02/20/2001	Sugiyama et al.	1.	<u> </u>			
	A73	6,194,722	02/27/2001	Fiorini et al.					
	A74	6,204,529	03/20/2001	Lung, et al.					
	A75	6,207,977	03/01/2001	Augusto	4				
	A76	6,210,988	04/03/2001	Howe et al.					
	A77	6,218,677	04/17/2001	Broekaert					
	A78	6,232,138	05/15/2001	Fitzgerald et al.					
	A79	6,235,567	05/22/2001	Huang					
	A80	6,242,324	06/05/2001	Kub et al.	†				
	A81	6,249,022	06/19/2001	Lin, et al.					
	A82	6,251,755	06/26/2001	Furukawa et al.					
	A83	6,261,929	07/01/2001	Gehrke et al.					
	A84	6,266,278	07/24/2001	Harari, et al.					
	A85	6,271,551	08/07/2001	Schmitz et al.					
	A86	6,271,726	08/07/2001	Fransis et al.	1.				
	A87	6,313,016	11/06/2001	Kibbel et al.	1	·			
	A88	6,316,301	11/13/2001	Kant	<del>                                     </del>				
_,17	A89	6,323,108	11/27/2001	Kub et al.	<b>†</b>				
Qu	A90	6,329,063	12/11/2001	Lo et al.					

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EXAM. NIT,		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE II APPROPRIATE
Alu	A91	6,335,546	01/01/2002	Tsuda et al.			07/30/1999
1	A92 6,	6,339,232 01/15/20	01/15/2002	2 Takagi	<del> -</del>		09/20/1999
	A93	6,368,733	04/09/2002	Nishinaga	,		08/05/1999
	A94	6,3,72,356	04/16/2002	Thornton et al.			04/028/2000
	A95	6,399,970	06/04/2002	Kubo et al.			09/16/1997
	A96	6,407,406	06/18/2002	Tezuka			06/29/1999
	A97	6,425,951	07/30/2002	Chu et al.			08/06/1999
	A98	6,429,061	08/06/2002	Rim			07/26/2000
	A99	6,420,937	07/16/2002	Akatsuka et al.			06/14/2001
	A100	6,521,041	02/18/2003	Wu et al.			04/09/1999
	A101	6,555,839	04/29/2003	Fitzgerald			05/16/2001
1	A102	6,583,015	06/24/2003	Fitzgerald et al.	<del></del>	1	08/06/2001
	A103	6,521,041	02/18/2003	Wu et al.			04/09/1999
	A104	2001/0003364	06/14/2001	Sugawara et al.	· · · · · · · · · · · · · · · · · · ·		12/08/2000
	A105	2002/0043660	04/18/2002	Yamazaki et al.			06/25/2001
	A106	6,593,191	07/15/2003	Fitzgerald			05/16/2001
	A107	6,573,126	06/03/2003	Cheng et al.			08/10/2001
	A108	2002/0096717	07/25/2002	Chu et al.			01/25/2001
	A109	2002/0100942	08/01/2001	Fitzgerald et al.			06/19/2001
	A110	2002/0123167	09/05/2002	Fitzgerald			07/16/2001
	A111	2002/0123183	09/05/2002	Fitzgerald			07/16/2001
	A112	2002/0123197	09/05/2002	Fitzgerald et al.			06/19/2001
	A113	2002/0125471	09/12/2002	Fitzgerald et al.	· ·		12/04/2001
	A114	2002/0125497	09/12/2002	Fitzgerald			07/16/2001
D	A115	6,603,156	08/05/2003	Rim	· ·	<del>                                     </del>	03/31/2001
21	A116	2003/0003679	01/02/2003	Doyle et al.			06/29/2001

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FOREIGN PATENT DOCUMENTS									
EXAM. INIT.	1	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N
AL	B1	41 01 167	07/23/1992	DE				NO	NO
1	B2	0 587 520	03/16/1994	EP				NO	YES
	В3	0 683 522	11/22/1995	EP				NO	YES
	B4	0 828 296	03/11/1998	EP		<del> </del>		NO	YES
	B5	0 829 908	03/18/1998	EP				NO	YES
	В6	0 838 858	04/29/1998	EP				NO	NO
	В7	1 020 900	07/19/2000	EP				NO	YES
	B8	1 174 928	01/23/2002	EP				NO	YES .
	B9	2 342 777	04/19/2000	GB				YES	YES
	B10	10-270685	10/09/1998	JР				NO	YES
	BII	11-233744	08/27/1999	JP				NO	NO
	B12	2000-021783	08/31/2000	JP				NO	YES
	. B13	2000-031491	01/28/2000	JP		1	1	NO	NO
	B14	2001-319935	11/16/2001	JP .				NO	YES
	B15	2002-076334	03/15/2002	JР				NO	YES
	B16	2002-164520	06/07/2002	JР				NO	YES
	B17	2002-289533	10/04/2002	JP				NO	YES
	B18	4-307974	10/30/1992	JP				NO	МО
	B19	5-166724	07/02/1993	JP				NO	Abstract Onl
	B20	6-177046	06/24/1994	JP				NO	Abstract Onl
	B21	7-106446	04/21/1995	Љ				NO	NO
	B22	7-240372	09/12/1995	JP		1		NO	Abstract Onl
, U	B23	00/48239	08/17/2000	wo				NO	YES
W.L.	B24	00/54338	09/14/2000	wo				NO .	YES

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Wen	B25	01/022482	03/29/2001	wo				NO	YES
,	B26	01/54202	07/26/2001	wo				NO	YES
	B27	01/93338	12/06/2001	wo			<u> </u>	NO	YES
	B28	01/99169	12/27/2001	wo		<u> </u>		NO	YES
	B29	02/071488	09/12/2002	wo		<u> </u>		NO	YES
1	B30	02/071491	09/12/2002	wo	T		<del> </del>	NO	YES
1	B31	02/071495	09/12/2002	wo	<del> </del>	-		NO	YES
	B32	02/082514	10/17/2002	wo				NO	YES
T .	B33	02/13262	02/14/2002	wo		<del>                                     </del>		NO	YES
	B34	02/15244	02/21/2002	wo		1	İ	NO	YES
	B35	02/27783	04/04/2002	wo				NO	YES
1	B36	02/47168	06/13/2002	wo ·	1		1	NO	YES
	B37	98/59365	12/30/1998	wo				NO	YES
	B38	99/53539	10/21/1999	wo		·		NO	YES
WI	B39	6-252046	11/19/1992	JP				NO	YES

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FORM I	PTO -	- 1449	ATTY DOCKET NO.:	ASC-023DVC2						
		TAL INFORMATION	APPLICANTS:	Fitzgerald						
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			FILING DATE:	December 17, 2001						
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		OTHER ART, JOUR	NAL ARTICLES, ET	<b>c.</b>						
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De	Cl	Armstrong et al., "Design of Si/SiGe Hete Transistors," IEDM Technical Digest (19								
	C2	Armstrong, "Technology for SiGe Hetero Massachusetts Institute of Technology, 1	ostructure-Based CMOS De 1999, pp. 1-154.	evices", PhD Thesis,						
C3 Augusto et al., "Proposal for a New Process Flow for the Fabrication of Silicon-based Complements MOD-MOSFETs without ion Implantation," Thin Solid Films, vol. 294, no. 1-2, pp. 254-258 (February 15, 1997).										
	C4 Barradas et al., "RBS analysis of MBE-grown SiGe/(001) Si heterostructures with thin, high Ge content SiGe channels for HMOS transistors," Modern Physics Letters B (2001) (abstract).									
	C5	Borenstein et al., "A New Ultra-Hard Etc Proceedings of the 1999 12th IEEE Inten (MEMs) (January 17-21, 1999) pp. 205-2	national Conference on Mi							
	C6	Bouillon et al., "Search for the optimal chexperimental study," IEEE, (1996) pp. 2	nannel architecture for 0.18	3/0.12 μm bulk CMOS						
	C7	Bruel et al., "@SMART CUT: A Promisi International SOI Conference (October 1)	ing New SOI Material Tec 995) pp. 178-179.	hnology," Proceedings 1995 IEEE						
	C8	Bruel, "Silicon on Insulator Material Tec pp. 1201-1202.	hnology," Electronic Lette	rs, Vol. 13, No. 14 (July 6, 1995)						
	C9	Bufler et al., "Hole transport in strained S Physics, Vol. 84, No. 10 (November 15,	Sil-xGex alloys on Sil-yG 1998) pp. 5597-5602.	ey substrates," Journal of Applied						
	C10	Burghartz et al., "Microwave Inductors at Technology", IEEE Transactions on Micr 1996, pp. 100-104.	nd Capacitors in Standard rowave Theory and Techni	Multilevel Interconnect Silicon iques, Vol. 44, No. 1, January						
	CH	Canaperi et al., "Preparation of a relaxed semiconductor devices with strained epite USA (2002) (abstract).	exial films," International I	Business Machines Corporation,						
	C12	Carlin et al., "High Efficiency GaAs-on-S IEEE (2000) pp. 1006-1011								
$\int_{-\infty}^{\infty}$	C13	Chang et al., "Selective Etching of SiGe/S No. 1 (January 1991) pp. 202-204.	Si Heterostructures," Journ	nal of the Electrochemical Society						
U	C14	Insulator (SGOI) Substrates," IEEE Elect	rement in Strained-Si n-MOSFETs Fabricated on SiGe-on- ctron Device Letters, Vol. 22, No. 7 (July 2001) pp. 321-323.							
De	C15	Cheng et al., "Relaxed Silicon-Germanium Electronic Materials, Vol. 30, No. 12 (20	m on Insulator Substrate by 01) pp. L37-L39.	y Layer Transfer," Journal of						

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Xh	C16	Cullis et al, "Growth ripples upon straine interactions," Journal of Vacuum Science 1924-1931.						
	C17	Currie et al., "Carrier mobilities and proc virtual substrates," J. Vac. Sci. Technol.	B., Vol. 19, No. 6 (Nov/De	c 2001) pp. 2268-2279.				
	C18	Eaglesham et al., "Dislocation-Free Stran Letters, Vol. 64, No. 16 (April 16, 1990)	рр. 1943-1946.					
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